

# Radilon® A RV250KB 856 BR

## Radici Group High Performance Polymers - Polyamide 66

### General Information

#### Product Description

PA66 25% glass fiber reinforced injection moulding grade. Heat stabilized. Natural brown colour.

Suitable for parts requiring medium stiffness, intended for use in contact with oil and grease at high temperature.

#### General

Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Heat Stabilizer
Features	• Grease Resistant • Heat Stabilized • Medium Stiffness • Oil Resistant
Uses	• Automotive Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Brown
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-T GF25

### Properties<sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.32	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.40	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	7.4	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	2.0	--	%	
Viscosity Index - Sulfuric Acid	3600	--	in <sup>3</sup> /lb	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.16E+6	841000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	24700	16700	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.8	6.0	%	ISO 527-2/1A/5
Flexural Modulus <sup>3</sup>	1.04E+6	609000	psi	ISO 178
Flexural Stress <sup>3</sup>	36300	22500	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	4.3	--	ft·lb/in <sup>2</sup>	
73°F	5.2	6.2	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	26	--	ft·lb/in <sup>2</sup>	
73°F	31	38	ft·lb/in <sup>2</sup>	
Notched Izod Impact Strength				ISO 180/1A
73°F	4.6	5.7	ft·lb/in <sup>2</sup>	

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<b>Thermal</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load 66 psi, Unannealed	482	--	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	446	--	°F	ISO 75-2/Af
Vicat Softening Temperature	482	--	°F	ISO 306/B50
Melting Temperature <sup>4</sup>	500	--	°F	ISO 11357-3
<b>Aging</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Change in Tensile Stress 284°F, 20000 hr	50	--	%	ISO 2578
338°F, 5000 hr	50	--	%	
<b>Electrical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity <sup>5</sup>	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity <sup>5</sup>	1.0E+15	1.0E+13	ohms·cm	IEC 62631-3-1
Comparative Tracking Index Solution A	600	--	V	IEC 60112
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
Flame Rating	HB	--		UL 94
Glow Wire Flammability Index				IEC 60695-2-12
0.04 in	1200	--	°F	
0.08 in	1250	--	°F	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.04 in	1250	--	°F	
0.08 in	1290	--	°F	

**Processing Information**

<b>Injection</b>	<b>Dry</b>	<b>Unit</b>
Drying Temperature - Desiccant Dryer	176	°F
Drying Time - Desiccant Dryer	2.0 to 4.0	hr
Dew Point - Desiccant Dryer	< -4	°F
Suggested Max Moisture	0.10	%
Processing (Melt) Temp	536 to 572	°F
Mold Temperature	176 to 212	°F
Injection Rate	Moderate-Fast	

**Notes**

- <sup>1</sup> Typical properties: these are not to be construed as specifications.
- <sup>2</sup> 300°C Melt Temperature/ 90°C Mold Temperature/ 60 MPa Cavity Pressure
- <sup>3</sup> 0.079 in/min
- <sup>4</sup> 10°C/min
- <sup>5</sup> 500V